Custodial, Labor and Trades Branch Plant Maintenance and Group Water Supervisory Series

EPWU WASTEWATER PLANT TECHNICIAN II

3/04 (AIS)

General Purpose

Under general supervision, oversee activities of a crew engaged in wastewater treatment plant operation and maintenance.

Typical Duties

Plan, direct and review shift operations to control routine wastewater treatment processes and synchronized wastewater pumping and disposal operations in compliance with state and federal permits. Involves: Monitor operations through successive wastewater treatment systems stages and recommend improvements and adjustments to optimize plant processes, as necessary. Take corrective action to ensure proper operation of pumps, motors, air compressors, thickeners, blowers, valves, gates or other equipment. Inspect and adjust digester levels and temperature, feed rate and gas quality and production. Monitor and perform basic laboratory tests of effluent prior to injection or release. Collect and test samples in accordance with federal and state regulations. Analyze and adjust chemical additives according to established guidelines. Respond to emergencies and determine remedial action.

Coordinate and perform installation, maintenance and repair of treatment systems and complex equipment. Involves: Assist in planning and directing repair of blowers, aeration systems, clarifiers, digestion equipment, mixers or similar mechanical equipment. Inspect machinery for proper operation and faulty parts. Replace bearings, sleeves, packing glands, oil columns, pumps, housings, shafts, spider bearings, pump bowls, or similar parts using hand tools. Check electrical equipment for shorts, faulty wiring, loose connections, loss of power and overload. Perform minor electrical or mechanical repairs including basic welding. Clean and flush sludge lines, wash or replace filters. Schedule and perform required preventive maintenance. Install fire sprinkler systems and meters. Requisition and maintain inventory of chemicals and supplies.

Supervise assigned personnel. Involves: Oversee or personally engage in scheduling, assigning, instructing, guiding, checking and evaluating day-to-day work units. Comply with and enforce personnel rules and regulations, standards of conduct, work attendance, and safe working practices. Prepare employee performance appraisals. Counsel, motivate and maintain harmonious working relationships among subordinates. Arrange for or engage in employee training and development. Recommend staffing and employee status changes.

Perform related incidental duties contributing to realization of unit or team objectives as required. Involves: Substitute for supervisor or coworkers during temporary absences, as qualified, by performing specific duties sufficient to maintain continuity of ordinary operations, as assigned. Provide designated support for special projects. Explain and demonstrate work performed to assist supervisor in training less knowledgeable employees. Prepare and maintain reports and records. Maintain inventory and requisitions supplies.

Knowledge, Abilities and Skills

- Considerable knowledge of wastewater treatment plant operation, maintenance and repair principles, practices, and procedures.
- Considerable knowledge of safe work practices and procedures.
- Good knowledge of wastewater treatment equipment operation and maintenance including but not limited to nitrification reactors, chemical flocculation chambers, flash mix tanks, oxidation chambers, clarifiers, sludge thickeners, digestors and disinfection units.
- Good knowledge of wastewater treatment chemicals, compounds, and processes, including but not limited to primary, secondary and tertiary processes.
- Good knowledge of Federal, State and local rules and regulations governing wastewater plant processes and effluent quality.
- Some knowledge of supervisory practices and procedures.
- Ability to plan, layout and complete installation, modification and repairs of wastewater treatment plant equipment.
- Ability to read and interpret technical manuals, blueprints and other documents used to install, adjust and set

various meters, gauges, and similar devices.

- Ability to read and record data from gauges, graphs, dials and other measuring instruments.
- Ability to calculate chemical formulas and estimates of required labor and materials cost.
- Ability to plan, assign, supervise, train, review and evaluate the work of assigned personnel.
- Ability to enforce personnel rules and regulations, safe working practices and procedures, standards of conduct and work attendance.
- Ability to communicate clearly and concisely, orally and in writing.
- Ability to establish and maintain effective working relationships with City employees, officials, contractors, regulatory agencies and the public.
- Ability to maintain records and prepare reports.
- Skill in safe operation and care of motor vehicle, computer network workstation and generic business
 productivity software, common equipment, hand tools and instruments to sample and measure water quality.

Other Job Characteristics

- Frequent exposure to moving machinery and equipment, chemicals, fumes, unpleasant odors, sewage and materials common to the treatment and operation of wastewater treatment plant and laboratory.
- Occasional lifting and carrying of moderate weight objects (up to 50 pounds).
- Occasional exposure to adverse weather conditions.
- Occasional driving through City traffic.

Minimum Qualifications

Education and Experience: Equivalent to a high school diploma or General Education Development (GED), plus five (5) years wastewater treatment plant operations or mechanical equipment maintenance and repair experience, including three (3) years at the level of Plant Technician I in a wastewater treatment plant.

Licenses and Certificates:

- Texas Class "C" Driver's License or equivalent from another state by time of appointment.
- Texas Comm<mark>ission on Enviro</mark>nmental Quality (TCEQ) Class "B" Sewage Certificate of Competency by time of appointment

Special Requirements:

- Subject to work a rotating shift schedule including weekends and holidays.
- Subject to mandatory recall during water utility emergency operations.

Human Resources Director			r		<u></u>	<u> </u>	Department Head